

**I CLAIM:**

1. A method for storing data on printed sheets, said method comprising:

dividing the data into a series of words, each word containing N bits of data, where N is a predetermined positive integer;

selecting a set of  $2^N$  unique colors;

assigning a unique color to each possible value of a word;

and

printing a series of regions on a sheet in a predetermined two-dimensional pattern, wherein each region corresponds to one word of data and the color of each region is determined by the unique color associated with the value of each word of data.

2. The method of claim 1 further comprising the step of printing information on the printed sheet defining parameters for retrieving data from the printed sheet.

3. The method of claim 1 wherein each unique color is created using a predetermined weighting of up to three primary colors.

4. The method of claim 1 further comprising the initial step of compressing the data.

5. The method of claim 1 wherein the regions are printed in a two-dimensional array.

6. The method of claim 5 wherein adjacent regions in the two-dimensional array are separated by a control line having a predetermined appearance.

7. The method of claim 6 wherein the control line comprises alternating regions having a predetermined appearances.

8. A system for storing data on a printed sheet comprising:  
a processor dividing data into a series of words, each word containing N bits of data, where N is a predetermined positive integer; said processor further assigning a color for each word of data from a predetermined set of unique colors, said color being determined by the value of the word; and

a color printer controlled by the processor printing a series of regions on a sheet in a predetermined two-dimensional pattern, wherein each region corresponds to one word of data and the color of each region is determined by the processor.

9. The system of claim 8 wherein the processor further directs the printer to print information on the printed sheet defining parameters for retrieving data from the printed sheet.

10. The system of claim 8 wherein each unique color is created using a predetermined weighting of up to three primary colors.

11. The system of claim 8 wherein the regions are printed in a two-dimensional array.

12. The system of claim 11 wherein adjacent regions in the two-dimensional array are separated by a control line having a predetermined appearance.

13. The system of claim 8 wherein the processor compresses the data before dividing the data into words.

14. A system for retrieving data stored on a printed sheet as a two-dimensional pattern of colored regions, said system comprising:

a color scanner scanning a printed sheet; and

a processor processing color information from the scanner to determine the color of each of a two-dimensional pattern of regions on the sheet from a predetermined set of unique colors, said processor generating a word of digital data for each region containing a predetermined number of bits of data, the value of the each word of data being determined by the color of the corresponding region on the sheet.

15. The system of claim 14 wherein the processor initially reads information from a predetermined region of the printed sheet defining parameters for retrieving the remaining data from the printed sheet.

16. The system of claim 14 wherein each unique color consists of a predetermined weighting of up to three primary colors.

17. The system of claim 14 wherein the regions are printed in a two-dimensional array.

18. The system of claim 17 wherein adjacent regions in the two-dimensional array are separated by a control line having a predetermined appearance.

19. The system of claim 14 wherein the processor decompresses the data after generating the words of data.

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